Calling-Party Pays Regimes

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Alternative Regimes for Mobile-Termination Charges

- Calling-party pays ("CPP")
  - ✓ Prevalent in most of the the world
- Receiving-party pays ("RPP")
  - ✓ Implemented in the U.S. and Canada
  - ✓ Both countries have considered implementing CPP but chose not to do so
- Same regime generally applies for fixed to mobile ("FTM"), mobile to mobile ("MTM") and incoming international

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Disadvantages of CPP

- Caller may unknowingly incur CPP charges for FTM calls
- Problems in the determination of mobile-termination charges
  - ✓Need for regulation

Caller May Unknowingly Incur FTM Charges under CPP

- Perhaps most important reason for FCC's initial decision
- Fixed carrier generally responsible for bad debt and can disconnect local service for non-payment
- Has not been a major concern in most countries
- Significant problem initially in Jamaica
  - ✓ Problem abates over time
  - ✓ Problem less important as mobile-termination costs decline

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Alternatives for Setting Mobile-Termination Charges under CPP (1)

- Unrestricted negotiations
  - ✓ Fixed carrier has much greater leverage
  - ✓ Charges likely to be below cost
- Mobile carrier sets charge and fixed carrier forced to pay it
  - ✓ Terminating access monopoly
  - ✓ Many regulators and international organizations have found the charges to be excessive

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Alternatives for Setting Mobile-Termination Charges under CPP (2)

- Regulation of mobile termination charges
  - ✓ Best alternative
  - ✓ Does not require regulation of prices that mobile network operators ("MNOs") charge their own customers

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Advantages of CPP: Theoretical Perspective (1)

- Externalities Associated with Usage
  - ✓ Both caller and called party benefit but only one pays
  - ✓ Usage externalities largely internalized within usual community of interest
  - ✓ Internalization less effective otherwise

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Advantages of CPP: Theoretical Perspective (2)

- Value of calls to called party vary considerably and may even be negative (telemarketers)
  - ✓ Limited distribution of mobile telephone numbers under RPP
- Calls always have significant value to calling party

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Advantages of CPP: Empirical Perspective

Mobile Subscribers in Countries with CPP and RPP	
Countries w/CPP	**Mobile Subscribers per 100 inhabitants (2001)**
France	60.53
Germany	68.23
Italy	83.94
Japan	58.78
United Kingdom	77.04
Countries w/RPP	
Canada	36.19
United States	45.08

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Advantage of Pre-Paid Mobile Under CPP

- Majority of users in pre-paid regimes are pre-paid
  - ✓ Buy own mobile telephone (used to be subsidized)
  - ✓ Zero monthly charge
  - ✓ High usage charge
  - ✓ No need to establish credit
  - ✓ Receive calls for free
- Complete solution to universal-service problem

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Summary of Historical Experience

- Both RPP and CPP have advantages and disadvantages
- Advantages of CPP seem greater

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Disadvantages of RPP Declining over Time

- Less advantage in restricting distribution of mobile telephone number
  - ✓ Great decline in usage charges
  - ✓ Can see identity of caller before answering the phone

Possible Future Alternative

- Implement both regimes through separate telephone numbers (e.g., special area codes for CPP)
- Would still need to regulate mobile-termination rates
- MNOs would be able to migrate out of regulation by offering especially good prices for RPP plans

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Incoming International Calls (1)

- In CPP regimes, mobile subscribers do not pay airtime for incoming international calls
  - ✓ No reasonable alternative, given that majority of users are pre-paid
- "Proxies" for costs corresponding to international settlements
  - ✓ 2 to 3 cents per minute for international component
  - ✓ 1 to 2 cents per minute for fixed termination
  - ✓ 5 to 10 cents per minute for mobile termination (upper end for developing countries)

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Incoming International Calls (2)

- Only good settlement regime in long run is to have different rates for fixed-terminated and mobile-terminated calls
  - ✓ Otherwise same price for services whose costs differ by factor of 2 to 3
- Reasonable for regulatory authority to insist that settlement rate which applies to mobile-terminated calls covers the cost of mobile-terminated calls
  - ✓ Otherwise: Incentives to block calls or otherwise not carry them

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Mobile-to-Mobile Calls

- Often a large difference in the prices of "on-net" and "off-net" calls
- Probably not constructive to regulate these prices that MNOs charge their own customers
- May be constructive to regulate mobile-termination charges for MTM calls

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Conclusions

- CPP regimes have many advantages but some disadvantages relative to RPP
- Under CPP, need different settlement rates for incoming international calls to fixed and mobile subscribers
  - ✓ Settlement rate should cover cost of mobile-termination

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